ACCESS PROCEDURE

FOR

HYDROLOGIC MODELS

HYDROLOGIC MODELLING BRANCH
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NLCS - Program Access Procedure

The following procedure has been developed to permit third parties to share Hydrologic Models currently held by the Water Resources Division for use on the NLCS Mainframe System. A listing of the available models is shown in Figure 1.

A request for program access will be filled as outlined below:

i) The requested model will be made accessible by copying the object code of the model from tape into the disk space of one of tne accounts of the Water Resources Division. It will be placed in a partitioned data set that has been allocated for shared programs. This data set is called "SHARED.PGMS"

ii) Arrangements will be made at NLCS to permit the third party to use this shared area of our disk space (See Appendix A).

iii) JCL will be provided to the potential user for the purpose of executing the requested object module. The JCL is presented in Appendix-B.

This JCL is a general purpose one, with several parameters yet to be specified. These parameters are identified by bold-face symbols and are explained to assist the user with their completion. Where appropriate, the unspecified parameter will be provided on request.

A sample JCL complete with all parameters specified is also shown. (See Appendix-C).

GUIDELINES

i) Access to the Hydrologic Models of the Water Resources Division is read-only (no modifications possible).

ii) Only that area of disk space called "SHARED.PGMS" will be made available.

iii) The source program will **not** be accessible.

iv) Charges for initiation of the requested program will be billed to the party requesting the use of the model.

Figure 1. Available Hydrologic Models

SWMM - Stormwater Management Model

HEC-1 - HEC Flood Hydrograph Package

ILLUDAS - Illinois Urban Drainage Area Simulator

STORM - Storage, Treatment, Overflow, Runoff Model

BCHICE - B. C. Hydro Ice Model

ICEMOD - Fenco Ice Model

HYMO - Problem-Oriented Computer Language for Hydrologic Modelling

VUH - Variable Unit Hydrograph Model

ISTORIC - Flood Frequency Analysis with Historic Information

LOWOUT - Flood Frequency Analysis with Low Outliers

FDRPFFA - Flood Frequency Analysis Model

SSARR - Streamflow Systhesis and Reservoir Regulation

HYDSTAT - Univariate and Multi-variate Statistical Applications

NONPARA -

Appendix A.

A completed copy of the form presented below must be given to NLCS Security Personnel who will then provide clearance to access the appropriate data set(s).

Appendix B. JCL for the Execution of a Hydrologic Model

The unspecified parameters are in **bold** and their descriptions below can be used to aid in their completion. When appropriate, the Specification column will contain the required parameter.

```
//PGacctA JOB (aaaa,a00X),1,5),'username',CLASS=X,
//    REGION=nnnK
/*JOBPARM Q=T
//*   JCL TO EXECUTE A MODEL
//STEP1 EXEC PGM=modname
//STEPLIB DD DSN=Gacct2A.SHARED.PGMS,DISP=SHR
//         DD DSN=SYS1.FORTHLIB,DISP=SHR
//* NOW GIVE NAME(S) OF INPUT DATA FILE(S)
//FT05F001 DD DISP=SHR,DSN=GacctA.data.ext
//FT06F001 DD SYSOUT=A
//
```

Parameter to be filled:	Description	Specification
acct	Account number of the party using the model.	
aaaa,a	The five digits of the "acct" separated with a comma as shown.	
username	Programmer's name (or any string of up to 20 characters to identify the job).	
nnn	Amount of space (in K-bytes) required for execution of the program.	
modname	Name of the module to be executed. This will be a member in a partitioned data set.	
acct2	Name of the Water Resources Division's Account containing the shared model.	
data.ext	Data file serving as input to the model for this run. eg. MODEL.DATA	

Appendix-C. Sample JCL for the Execution of a Hydrologic Model

```
//PG14805A JOB (1480,500X),1,5),'POWER',CLASS=X,
//   REGION=256K
/*JOBPARM Q=T
//*   JCL TO EXECUTE A MODEL
//STEP1 EXEC PGM=ICEMOD
//STEPLIB DD DSN=G14817A.SHARED.PGMS,DISP=SHR
//         DD DSN=SYS1.FORTHLIB,DISP=SHR
//* NOW GIVE NAME(S) OF INPUT DATA FILE(S)
//FT05F001 DD DISP=SHR,DSN=G14805A.ICEMOD.DATA
//FT06F001 DD SYSOUT=A
//
```

This JCL shows how the owner of account 14805 (username "POWER") is accessing a program "ICEMOD" contained in account 14817. The data file for ICEMOD is in account 14805 and is called "ICEMOD.DATA".